

Stage 6		
Topics		
Half Term 1	Number System S6	Place value from 8 digits to 3 decimal places Multiply and divide numbers by 10, 100, 1000 up to 3 decimal places Using negative numbers with temperature and other contexts Common multiples and common factors Know the first few prime, square, cube and triangle numbers
	Calculating 1 S6	Rounding integers to the nearest 10,100 or 1000 and decimals to 1dp Order decimals Use the order of operations, including brackets Use mental methods with decimals, fractions, percentages and simple problems
		Multiply and divide 3-digit by 2-digit whole numbers Multiply and divide decimals with 1 or 2dp by single-digit whole numbers Use a range of checking e.g. estimating and inverse operations
	Calculating 2 S6	Use short division to divide 3- and 4-digit numbers by 1- or 2-digit numbers Use long division, including to divide a 3- or 4-digit number by a 2-digit number Write the remainder of a division problem: - as a fraction - as a decimal by extending beyond the decimal point Extract information to set up a division problem
	Algebra 1 S6	Substitute numbers into one- and two-step formulae written in words Create one- and two-step formulae from given informations Use letters to represent unknown numbers Know the meaning of expression and equation Collecting like terms
Half Term 2	FDP 1 S6	Understand that two fractions can be equivalent Simplify a fraction to write it in its lowest terms Understand that a fraction is a way of representing a division Compare two fractions by considering diagrams and equivalent fractions Know standard fraction/decimal/percentage equivalences (e.g. 10%, 25%, 50%, 75%)
	Shape S6	Use a protractor to draw angles up to 180° Use a protractor to work out and construct reflex angles Use a ruler to draw lines to the nearest millimetre Know the names of common 3D shapes Use mathematical language to describe 3D shapes Construct 3D shapes from given nets Draw accurate nets for common 3D shapes
	Sequences 1 S6	Find the next term in a linear sequence Find a missing term in a linear sequence Generate a linear sequence from its description Know the Fibonacci Sequence
	Constructions 1 S6	Measure lines to the nearest 1mm and angles to the nearest degree Construct SAS and ASA triangles using rule and protractor know the meaning of faces, edges, vertices and 'regular' polygons identify line and rotational symmetry in polygons
		Probability S6
f term 3	Proportion S6	Identify when a comparison problem can be solved using multiplication and/or division Find the value of a single item in a comparison problem Understand the meaning of enlargement and scale factor Find the scale factor for a given enlargement Use knowledge of fractions and multiples to solve a sharing (or grouping) problem
	Measures S6	Convert between non-adjacent metric units; e.g. kilometres and centimetres Use decimal notation up to three decimal places when converting metric units Convert between Imperial units; e.g. feet and inches, pounds and ounces, pints and gallons
	Geometry 1 S6	Identify angles that meet at a point Identify angles that meet at a point on a line

Half		Identify vertically opposite angles Know that vertically opposite angles are equal Use known facts to find missing angles
	Statistics 1 S6	Understand and read scales on graphs Construct and interpret pictograms Construct and interpret a bar chart Construct and interpret a line graph Construct and interpret pie charts by measuring angles
Half Term 4	Statistics 1 S6	CONTINUING FROM HALF TERM 3
	Checking & Est S6	Approximate any number by rounding to a specified degree of accuracy, e.g. nearest 20, 50, 1 000 000 Understand estimating as the process of finding a rough value of an answer or calculation Use estimation to predict the order of magnitude of the solution to a calculation Estimate multiplication and division calculations involving upto four-digit numbers by two-digit numbers
	FDP 2 S6	Add and subtract fractions, including with different denominators and mixed numbers Multiply a proper fraction by a proper fraction Divide a proper fraction by a whole number Find 10% of a quantity Use non-calculator methods to find a percentage of an amount Use decimal or fraction equivalents to find a percentage of an amount
	Coordinates and Graphs S6	Plot points in all 4 quadrants Draw a table of values Plot equations in the form $y=mx+c$, $ax+by=c$, $y=3$ and $x=4$
Half Term 5	Algebra 2 S6	Solve missing number problems expressed in words and algebraically Know the basic rules of algebraic notation Solve basic linear equations using balance method Solve basic problems using graphs and equations. i.e. show that you can solve $y=2x-3$ using a graph Substitute into Formulae and where this leads to an equation to solve; e.g. $3x+2y=19$, Find x if $y=2$
	Area and Volume S6	Know the formulae and units for areas of rectangles, triangles, parallelogram Know the formula for the volume of a cuboid Convert between metric units of area and volume in simple cases
Half Term 6	Transformations S6	Use coordinates to describe and write the position of a point in all 4 quadrants Construct a 2D coordinate grid Use coordinates to plot a set of points in all 4 quadrants to construct a polygon Solve problems involving coordinates Carry out a translation Carry out a reflection using one of the axes as a mirror line
	Shape 2 S6	Know the definitions of special triangles and quadrilaterals Classify 2D shapes using given categories; e.g. number of sides, symmetry Know the angle sum of a triangle Know the angle sum of a quadrilateral Know how to find the angle sum of any polygon Use the angle sum of a triangle to find missing angles Find the missing angle in an isosceles triangle when only one angle is known Use the angle sum of a quadrilateral to find missing angles Know how to find the size of one angle in any regular polygon Find all the nets for a cube Use a net to visualise the edges (vertices) that will meet when folded
	Statistics 2 S6	Understand the meaning of 'average' as a typicality (or location) Understand the mean as a measure of typicality (or location) Calculate the mean of a set of data Use the mean to find a missing number in a set of data Use the Mode as an average Understand that the Mode is the ONLY way to find the average of non-numerical data Be able to find range Understand Range as a measure of how spread out the data is

